

Table 4-1
ORF annual demand data sample format
Operational Readiness Float Jan 1 thru 31 Dec 19

| Installation or Unit | LIN | Noun | Tot. Dmd. | MACOM Avg. Down- time Days | ORF Auth (TAEDP) | Qty o/h | MSC Code | Rmk |
|-------------------------|--------|-----------|--------------|--|------------------------|------------|-------------|-----|
| W45XU1 | T61494 | TRK, Util | 2 | 5 | 1 | 1 | | |
| W45CU1 | T61494 | TRK, Util | 4 | 10 | 2 | 1 | | |
| MACOM TOTAL | | | 6 | 8.03 | 3 | 2 | | |

Notes:

1. Primary sort should be by MSC code.
2. Enter installation or unit name and UIC of the unit actually holding the ORF assets.
3. Enter the LIN in alphabetical order.
4. Tot. Dmd. is total demands for an item including those that were issued and those that would have been issued if an asset had been available.
5. Avg. Downtime Days is the average of the total downtime in days of all items for which an ORF demand was recorded.
6. ORF Auth. TAEDP is the total MACOM authorization for an item as shown in the TAEDP.
7. Remarks will be used by the MACOMs to provide additional information or highlight specific problems not reflected by the data.
8. Consecutively numbered notes referred to in 'Remarks' and entered at the end of the report are acceptable.
9. MACOMs will submit a roll up of subordinate ORF accounts. Each LIN will be summarized at the MACOM level (to include the average down time computed at the MACOM level).
10. Average down time at MACOM level is computed by adding the average down time in days times the total demands, for each unit, and then dividing by the total MACOM demands.

Chapter 5

Commodity-Oriented Maintenance Policies

Section I

Maintenance of combat vehicles

5-1. Overseas commands not having depot maintenance capability

Overseas commands not having depot maintenance capability will report combat vehicles requiring depot maintenance support to, and receive disposition instructions from, the appropriate materiel proponent under AR 750-2.

5-2. Utilization programming

Operational usage standards for combat vehicles will be established by each MACOM. These standards will be stated in terms of average miles/rounds per vehicle and total allowable unit and fleet mileage per unit of time. The objective of these standards is to ensure the development of a command usage pattern for combat vehicles that will result in these items reaching replacement at a rate consistent with in-country and/or DA ability to replace them. The ARNG and USAR must perform periodic rotation of high usage combat vehicles at MATES and ECSs with low usage combat vehicles to ensure equal utilization.

5-3. Selection of equipment for overhaul

a. Combat vehicles reaching a mileage interval prescribed by AMC will be inspected by wholesale level teams that apply a scoring procedure developed by AMC to select those vehicles in need of an overhaul. Only these vehicles will be directed for return to an AMC depot. A copy of the evaluation will accompany the vehicle when it is sent to an overhaul facility.

b. Combat vehicles not yet reaching the prescribed mileage threshold but considered to be overhaul candidates by the user MACOM, may be nominated by the MACOM for evaluation by the teams.

c. Combat vehicles requiring extensive modernization in a depot facility may be inducted without benefit of the combat vehicle evaluation. These vehicles are repaired as necessary during the modernization.

d. Approved repair candidates will be scheduled and retrograded

into depot maintenance shops per the annual combat vehicle evaluation program.

e. Combat vehicles eligible for depot overhaul by this regulation will be—

(1) Replaced with new, or low mileage vehicles when such assets are available.

(2) Repaired at depot maintenance shops and returned to user when replacement assets are not available.

f. When a replacement item is not available and the depot cannot repair and return it to user, MACOMs will repair the items to GS standards. Units will continue using the item at a low priority, low usage rate until a replacement is available.

g. The ARNG major item maintenance requirement program for surface equipment will be developed as a part of TAMMS data submitted by the States. All depot maintenance for end items (except aircraft) will be on an exchange or repair-and-return basis. The aircraft depot repair program will be scheduled on an exchange basis. All surface depot programs for major end items will be controlled and funded at the NGB level. States will coordinate directly with supporting area TMDE support teams (ATSTs) for calibration services and calibration repairs provided to the State under NGB-funded programs. Surface equipment that requires unscheduled or urgent depot repair will be reported to NGB-ARL-M for consideration on a case-by-case basis, and aircraft in that condition will be reported to NGB-AVN. Army surface equipment will be selected for depot repair under the following criteria:

(1) All major end items, type classified standard, that meet condition requirements as determined by the commodity command concerned.

(2) All major end items, type classified standard, in an unserviceable condition beyond the capability of GS maintenance.

(3) Major end items that have a record of frequent maintenance failure requiring extensive repairs and for which the recurring failures, if repaired at a depot facility, would be cost-effective.

(4) Combat vehicles will be selected for depot repair on a condition basis (not on mileage) when technical inspection by GS maintenance indicates that depot repair is in the best interest of economy and readiness.

(5) Towed and self-propelled artillery weapons, mortars, and recoilless rifles will be selected for depot repair per TB 750-231.

(6) Tube launched, optically tracked, wire guided (TOW) missile system components requiring repairs or services that are beyond the

capability of GS maintenance will be reported to U.S. Army Missile Command (MICOM), Redstone Arsenal AL, 35898-5238, for evacuation instructions. Dragon missile system components requiring repairs or services that are beyond the capability of DS maintenance will be reported to Anniston Army Depot for exchange. Missile system component support will be funded by the NGB through Missile Command. When support is obtained from an Active Army installation or organization, repairs and/or maintenance services provided will be funded as agreed upon by the contracting parties.

(7) For current year requirements, NGB-ARL-M will provide the commodity commands and Depot Systems Command with the DD Form 448 (Military Interdepartmental Purchase Request) for major end items and calibration services/repair support. Calibration services and red tag repair of TMDE will be funded by NGB and provided by the TMDE support group ATSTs to States within the team's area of responsibility. A schedule for depot work input will be provided to each State concerned. The State will prepare a DA Form 2407 to the designated depot with necessary shipping documents. The State will retain ownership of the item during the entire repair-and-return process, or the item may be exchanged. Transportation costs of a major item to and from depots will be per AR 130-400.

(8) Reconditioning and repairing of combat vehicle tracks and road wheels and related rubber products will be funded directly by NGB. Scheduling for such work should be coordinated with RRAD project office, and forwarded directly to CDR, Red River Army Depot, Production Control Division, ATTN: DRCRR-MD, Texarkana, TX 75501.

(9) For other than major item repairs and/or services to be provided through the Army depot system, requests for secondary items and fuel tank recoating will be processed as follows: States requiring DS or GS level backup maintenance assistance will request such support from the commodity command having responsibility for the item. Repair of secondary items (for example, ballistic computers, telescopes, and periscopes) are authorized if a replacement is not available through the supply system, the cost of repair is less than 50 percent of the replacement cost, or if the time to receive a replacement item will adversely impact on the unit's readiness.

5-4. Waivers

Requests for waiver will be submitted per paragraph 1-4. In addition, the request will detail the availability of vehicles in terms of full mission capable or not mission capable, supply or maintenance, and safety as a function of usage.

Section II Maintenance of Watercraft and Amphibians

5-5. General

a. Purpose. To establish policies that are specific to the maintenance of Department of the Army watercraft.

(1) The materiel maintenance system that supports Army watercraft is made up of diverse maintenance activities that share the common goal of creating and sustaining watercraft combat readiness.

(2) The three major functional responsibilities of the Army watercraft maintenance activities are sustaining materiel in an operational status, restoring it to a serviceable condition, and updating or upgrading its functional usefulness through modification and product improvement.

(3) The objective of Army watercraft maintenance is to ensure safe, seaworthy, reliable, and fully mission-capable watercraft.

b. Scope. This section applies to Army watercraft and amphibians worldwide.

(1) Army watercraft and amphibians are defined in AR 56-9, DA Pam 738-750 and TM 55-500.

(2) Tactical river crossing materiel or non-MTOE/TDA watercraft utilized by the U.S. Corps of Engineers in its civil works projects/activities (except those items of marine engineering materiel

to be activated in the time of mobilization) are excluded from the requirements herein.

c. Organization. To accomplish the objectives of the Army watercraft maintenance system, watercraft maintenance tasks are distinctly organized into wholesale and retail maintenance; each is responsible for the performance and management of its materiel maintenance functions. This responsibility is established in ARs, TOEs, MACs, preventive maintenance manuals and other regulatory and technical publications.

(1) Retail maintenance is that maintenance that is within the capability of and is the responsibility of the operating forces. The responsibility to perform retail maintenance operations within a given level (unit, DS, or GS) is assigned based upon mission, degree of mobility and complexity, intended availability of personnel, skills and materiel resources. Actual maintenance tasks to be performed are listed in the MAC of the applicable technical manual.

(2) Wholesale maintenance is that maintenance that is beyond the capability of the operating forces and commonly referred to as depot level maintenance. Specifically, wholesale maintenance is defined as that level of maintenance requiring the necessary personnel, skills, facilities and equipment to perform industrial type maintenance functions. Wholesale maintenance is solely the responsibility of the National Maintenance Point (NMP).

5-6. Maintenance policies

a. General.

(1) All watercraft maintenance units and activities will ensure compliance with this regulation. The NMP will ensure that wholesale level operations are in full compliance with this regulation and AR 750-2.

(2) The NMP/NICP will establish and maintain watercraft configuration and logistics support management programs necessary to support watercraft throughout its lifecycle.

(3) The NMP will provide a system, as shown below, for the performance of maintenance and/or repair actions on Army watercraft that exceed the capability and/or capacity of the retail level.

(a) Overhaul/repair of end items and other materiel designated by the equipment proponent via the MAC or other appropriate means.

(b) Manage/execute the On Condition Cyclic Maintenance (OCCM) Program for Army watercraft.

(4) The NMP will establish and maintain a system for providing maintenance guidance and direction to the retail community upon request.

b. Emergency repairs.

(1) A thorough marine condition survey/technical inspection will be performed by qualified personnel to ascertain the scope of work necessary to return a watercraft to a serviceable condition.

(2) Should wholesale maintenance be required, due to the scope of work necessary to return the watercraft to a serviceable condition, disposition instructions and funding guidance will be requested from the NMP/NICP. Wholesale maintenance will be accomplished on a case-by-case basis as directed by the NMP as shown below.

(a) When emergency repairs dictate that a watercraft be dry-docked to accomplish the necessary repairs it is considered wholesale maintenance.

(b) When operational conditions dictate, the NMP may authorize lower level maintenance activities to perform emergency repairs beyond their authorized level of repair action.

(c) Watercraft awaiting disposition instructions will be maintained in administrative storage.

(3) When engaged in sailing operations (underway/deployed away from home port) and maintenance problems occur where normal corrective action can not be completed, a vessel master is authorized to perform any level of maintenance required to maintain the watercraft in a seaworthy, safe and operable condition. This decision will be made while considering the availability of resources at sea, the skill of the crew, and the impact the repairs will or will not have on the basic sea-worthiness and operability of the watercraft.

(a) When the above condition exists, suitable repairs may be accomplished to correct the emergency. However, materiel so

repaired must be removed from operation as soon as possible and properly repaired before being returned to an operational condition.

(b) The NMP will provide maintenance instructions and assistance in the above cases upon request.

(c) The above policy is also applicable to maintenance of electronic materiel installed on-board watercraft.

c. ORF support, when authorized, will normally be limited to landing craft, amphibious lighters, and associated support materiel.

d. Requests for assistance and/or guidance should be made through normal channels to—

(1) Mailing address: Commander, U.S. Army Aviation and Troop Command, ATTN: AMSAT-I-MMWR, 4300 Goodfellow Blvd, St. Louis, MO 63120-1798.

(2) Message address: CDR ATCOM STL MO//AM-SAT-I-MMWR//.

(3) FACSIMILE: Cdr ATCOM, ATTN: AMSAT-I-MMWR, DSN 693-9373.

5-7. On condition cyclic maintenance

a. *General.* All Army watercraft will undergo OCCM per the intervals established in table 5-1. The intervals in table 5-1 are maximum time intervals. If more than 3 months deviation is anticipated, a request for waiver with justification will be forwarded to ATCOM. OCCM consists of a series of inspections and maintenance actions that are designed to ensure that a watercraft's structure (internal and external), piping, main and auxiliary engines, electrical installations, life-saving appliances, fire detecting and extinguishing equipment, pollution prevention equipment, and other equipment is maintained in a suitable, seaworthy, and safe condition.

Table 5-1
On Condition Cyclic Maintenance/Drydocking Intervals

| Class/Type watercraft | OCCM Interval |
|--------------------------|------------------------------|
| Class "A" | |
| BDL, DS 5002 | 36 Months |
| LSV | |
| FS, All | (OCCM Survey at 30 Mos) |
| LT, DS 3006 | |
| ST, DS 3004 | (Interim Survey at 18 Mos) |
| LCU, All | |
| Class "B" | |
| J Boat, DS 4003 | 36 Months |
| T Boat, DS 2001 | |
| LCM-8, All | (OCCM Survey at 30 Mos) |
| FB, All | |
| ST, DS 320 | (Interim Survey at 18 Mos) |
| Class "C-1" | |
| ROWPU Barges | 36 Months |
| FMS, DS 7011 | |
| BRM, DS 7016/7010 | (OCCM Survey at 30 Mos) |
| BD, DS 264B/413D | |
| BG, DS 231B/231C | (Interim Survey at 18 Mos) |
| Class "C-2" | |
| Stationary Tng Platforms | 48 Months |
| BC, All | |
| BCDK, All | (OCCM Survey at 42 Mos) |
| BK, All | |
| BPL, All | (Interim Survey at 24 Mos) |
| Wooden Hull Vessels | 12 Months |
| Q Boot, DS 4002 | (OCCM Survey at 6 Mos) |
| | (No Interim Survey Required) |

b. *Inspections.* Marine condition surveys incident to the performance of OCCM will be accomplished per paragraph 5-8.

(1) One hundred eighty days prior to the scheduled OCCM cycle

a marine condition survey will be performed. This survey will provide the basis for written specifications by which OCCM is accomplished. This will be a dock-side inspection. When possible, the services of qualified divers will be utilized to ascertain the condition of the watercraft's hull and appendages below the deep load waterline.

(2) At the time of dry-docking, a dry-dock inspection will be performed to identify additional repair/maintenance requirements not observable at the time of the 180 day inspection (dockside).

(3) Periodic surveys required by the United States Coast Guard (USCG) and the American Bureau of Shipping (ABS) for retention of "loadline" certification will be accomplished per 46 CFR subchapter E and TB 55-1900-201-45/1. When such inspections are required, the services of ABS will be employed.

(4) In addition to the 180 day marine condition survey, the NMP will also conduct an interim survey after 50 percent of the OCCM drydocking interval has elapsed. Whenever possible this survey will also include an underwater hull survey as defined by TB 55-1900-201-45/1.

c. *Maintenance.* The scope of work to be accomplished during OCCM will vary dependent on watercraft condition, resource limitations, class of vessel, and other factors. As a minimum, the following maintenance and repair actions will be accomplished during OCCM:

(1) Bottom cleaning and painting up to the deep load waterline per TB 43-0144.

(2) All repairs below the deep load waterline as identified during the dry-dock inspection/underwater hull survey.

(3) Overhaul/replacement/renewal of all major components identified for overhaul at the depot level. The requirements will be determined through diagnostic testing, hours of operation, and inspection of internal components as directed by the NMP.

(4) All other maintenance and/or repairs identified by the marine/ship surveyor required to effect a permanent change in the watercraft's condition so as to ensure the following:

(a) Capability of operating in an unrestricted manner for the purposes intended.

(b) Capability of being maintained and operated per all applicable regulations, rules, laws, and policies.

(c) The sustainment of the inherent reliability and maintainability designed and manufactured into the equipment between repair cycles (OCCM).

(d) The sustainment of acceptable rates of watercraft readiness between OCCM cycles.

(5) Application of all outstanding modification MWOs, minor alterations, modernization and/or special inspections will, to the maximum extent feasible, be accomplished concurrently with OCCM.

5-8. Marine condition surveys

a. *General.* Marine condition surveys are technical inspections and written evaluations performed by qualified marine surveyors per TB 55-1900-201-45/1. The NMP is responsible for developing the policies and procedures applicable to the performance of marine condition surveys.

b. Marine condition surveys on Army watercraft will only be performed by experienced and qualified technical experts. This requires the surveyor to be thoroughly familiar with and capable of interpreting written standards, Federal laws, rules, and regulations affecting watercraft inspection, common watercraft construction, maintenance and repair procedures. The marine surveyor must also be capable of preparing written repair specifications and estimating repair costs (man-hour and materiel costs) for repairs required to return a watercraft to condition code "B" as defined by AR 725-50.

c. The NMP is responsible for the performance of all marine condition surveys incident to the repair and/or overhaul of Army watercraft when the maintenance/repair action is to be accomplished at the depot level. This includes all marine condition surveys incident to the accomplishment of OCCM as defined by this regulation.

d. Support maintenance organizations and activities at the retail

level are responsible for performing marine condition surveys incident to the repair of Army watercraft at their level or evacuation to the next highest level.

e. When qualified marine surveyors are not available at support facilities, assistance may be requested through normal channels to the NMP IAW para 5-6 above.

5-9. Maintenance reporting

TAMMS forms and records on watercraft, landing craft, and amphibians will be completed according to DA Pam 738-750, TB 43-0002-26, TB 55-1900-205-24, TB 55-1900-201-45/1, and AR 56-9.

Section III

Maintenance of Communication Security (COMSEC) Materiel

5-10. General requirements

a. The maintenance of COMSEC materiel is greatly influenced by the security requirements concerning personnel, operations, and maintenance of COMSEC materiel. These requirements are contained in AR 5-3, the AR 380-series, AR 604-5, AR 640-15, and DA Pam 738-750.

b. COMSEC materiel consists of—

(1) Publications and classified equipment that are managed within the COMSEC materiel control system.

(2) Publications and unclassified COMSEC equipment that are managed within the Army maintenance and supply systems.

c. The CG, AMC is responsible for the wholesale logistic support of Army COMSEC materiel.

d. Commanders at all levels are responsible for the proper maintenance of COMSEC materiel under this regulation.

e. This section applies to—

(1) All elements of the active Army, ARNG, and USAR that maintain, inspect, or requisition COMSEC materiel.

(2) Contracting officers who administer Army contracts that require or authorize the issue of COMSEC materiel to a contractor.

5-11. Maintenance policies

a. TMDE used for maintenance of COMSEC materiel will be calibrated under AR 750-25, TB 43-180, or specifications issued by the CG, AMC.

b. Unit, DS, GS, SRA, and depot maintenance will be accomplished on COMSEC materiel under the concepts and policies set forth in chapter 3 and this section as modified by COMSEC directives and materiel publications.

c. General technical instructions for completion of maintenance operations and testing of COMSEC materiel are contained in National Security Agency maintenance documents and in DA materiel publications. DA Pam 310-9 contains a listing of those publications that apply to COMSEC materiel and gives requisitioning instructions for National Security Agency and DA publications.

d. The provisions of DOD 5220.22-R and Federal acquisition regulations that pertain to contract maintenance apply to COMSEC materiel. In addition, commanders and contracting officers will ensure that contractors meet all applicable criteria contained in this regulation and AR 750-2. To ensure that these criteria are satisfied, as well as to facilitate the management of COMSEC materiel, requests for exception will be forwarded to the Commander, USACSLA, ATTN: SELCL-NMP, Fort Huachuca, AZ 85613-7090 for approval.

5-12. Modification of COMSEC materiel

Modification of Army-owned COMSEC materiel will be reported under DA Pam 738-750.

5-13. Records and reports

Performance of maintenance operations on COMSEC materiel will be recorded under DA Pam 738-750.

5-14. Qualification and training of maintenance personnel

a. The personnel qualification requirements for the maintenance of COMSEC materiel are established in AR 640-15.

b. The initial training of personnel for the support of new or modified COMSEC materiel will be under DA Pam 351-4.

5-15. Supply of parts and special tools

a. COMSEC maintenance activities will establish and maintain PLL and shop stocks per AR 710-2, for both classified and unclassified repair parts.

b. Cannibalization of COMSEC materiel will be accomplished according to chapter 4, after approval by the Commander, USACSLA, ATTN: SELCL-NMP.

c. Tools and TMDE required for the maintenance of COMSEC materiel are authorized by appropriate MTOE, TDA, or nontactical telecommunications development projects. They will be obtained per AR 710-2.

d. Repairable exchange procedures for COMSEC materiel are in AR 710-2.

5-16. Evacuation of unserviceable COMSEC materiel

a. COMSEC equipment will be evacuated to the next maintenance level only after a qualified, certified inspector determines that evacuation is required per AR 640-15.

b. Unserviceable COMSEC materiel in CONUS and overseas areas that meets the above criteria will be evacuated through supply channels to the Commander, Bluegrass Army Depot (BGAD), ATTN: COMSEC Account 5B1001, Lexington, KY 40511. The only exception to automatic evacuation of unserviceable materiel is that unserviceable AUTOSEVOCOM equipment will be reported to the Commander, U.S. Air Force Cryptologic Depot, ATTN: LGGCYC, San Antonio, TX 78241, for disposition.

c. Components, assemblies, and parts that have manufacturing defects will be removed from the materiel at the authorized maintenance level. The removal will be reported on SF 368 as a Category II quality deficiency report under DA Pam 738-750. When practical, exhibits (defective components, parts, or assemblies) will be forwarded with the quality deficiency report. Those parts not forwarded will be tagged with DA Form 2402 (Exchange Tag), and held for further disposition instructions.

5-17. Controlled cryptographic items (CCI)

a. CCI are declassified COMSEC items. Accounting and requisitioning/issued procedures are in AR 710-2.

b. CCI end items must be unkeyed prior to storage when not in operational status or when being turned in through channels for maintenance.

Section IV

Maintenance for Army Aircraft

5-18. Aviation maintenance objective

The objective of Army aviation maintenance is to ensure safe, reliable, and full mission-capable aviation weapons systems. This includes airframes, engines, major components, avionics, aerial weapons, fire control/fire direction items, and other airborne ancillary materiel necessary to support the total aviation weapon system concept. To accomplish these objectives, three levels of aviation maintenance are established: AVUM, AVIM, and aviation depot maintenance.

5-19. Aviation unit maintenance

a. These activities will be staffed and equipped to perform high frequency "on-aircraft" maintenance tasks required to retain or return aircraft to a full mission-capable condition. The maintenance capability of the AVUM is governed by the maintenance allocation chart and limited by the amount and complexity of ground support equipment, facilities required, the number of spaces, and critical skills available. The range and quantity of authorized spare modules, ground support equipment (GSE), TMDE, and components will be

consistent with the mobility requirements dictated by the air mobility concept. Assignment of maintenance tasks to divisional or other (TDA/MTOE) company size aviation units will be based on overall maintenance capability, the requirement to conserve personnel and materiel resources, and air mobility requirements. If the aviation element is less than 10 aircraft, maintenance will normally be limited to scheduled inspections, minor adjustments, and minor repair.

b. ARNG Army Aviation Flight Activity (AAFA) will perform AVUM maintenance. Functions are defined in NGB Pam 750-2. Maintenance beyond the capability of these organizations will be performed by the supporting Army Aviation Support Facility (AASF).

c. The AASF will perform AVUM and limited AVIM maintenance per NGB Pam 750-2. This includes diagnosis, servicing, preventive maintenance intermediate (PMI), phased maintenance (PM), special inspections, aircraft recovery and evacuation, aircraft weighing, maintaining authorized ORF aircraft, minor airframe repair, avionics, and armament repair. These functions are specifically detailed in NGB Pam 750-2. Requests to exceed—

(1) Maintenance authority will be forwarded to the supporting Aviation Classification and Repair Activity Depot (AVCRAD).

(2) Expenditure limits (funds/work hours) will be forwarded to Chief, NGB, NGB-AVN-L, through the supporting AVCRAD.

d. An Aviation Support Facility in the USAR collocated with a supported AVIM unit may be authorized by HQDA to perform intermediate maintenance using tools/equipment authorized to the supported unit. If authorized, the expanded mission will only be in support of collocated Army Reserve aircraft and will be terminated upon movement/inactivation of the collocated AVIM unit.

5-20. Aviation intermediate maintenance

a. AVIM units or activities will—

(1) Furnish mobile, responsive, one-stop maintenance support.

(2) Perform all maintenance functions as designated by the MAC in materiel publications. Authorized maintenance includes replacement and repair of modules and components and repair of end items that can be efficiently accomplished with available skills, tools, and materiel.

(3) Repair materiel for return to user and emphasize support of operational readiness requirements.

(4) Establish a program to support AVUM units by repairing selected items for return to stock when such repairs cannot be accomplished at the AVUM level.

(5) Inspect, troubleshoot, test, diagnose, repair, adjust, calibrate, and align aircraft system modules and components. Module and component disassembly and repair will normally be limited to tasks requiring cleaning and the replacement of seals, fittings, and items of common hardware.

(6) Determine the condition of specified modules and components removed prior to the expiration of the time between overhaul or finite life.

(7) Perform aircraft weight and balance inspections and other special inspections that exceed AVUM capability.

(8) Furnish quick response maintenance support and technical assistance through the use of mobile maintenance support teams and aircraft recovery and evacuation.

(9) Maintain authorized ORF aircraft.

(10) Furnish collection and classification services for serviceable and unserviceable materiel.

(11) Operate a cannibalization point activity under AR 710-2.

b. The aircraft maintenance company within the division will perform AVIM functions consistent with air mobility requirements and conservation of personnel and equipment resources.

c. Additional intermediate maintenance support will be furnished by the supporting nondivisional AVIM unit.

d. Maintenance functions that do not contribute to sustaining air mobility will be assigned to depot maintenance.

e. Unserviceable repairable modules, components, and end items that are beyond the capability of AVIM to repair will be evacuated to depot maintenance.

f. Ground support equipment and TMDE will be evacuated to the appropriate nonaviation maintenance unit when it is beyond the capability of AVIM to repair.

g. Calibration and repair of TMDE will be performed as indicated in AR 750-25, TB 750-25 and TB 43-180.

5-21. Aviation depot maintenance

a. Army aircraft will be maintained and supported to the extent authorized in this regulation and TB 43-0002-3. Army aircraft may be accepted into depot facilities for programmed or unprogrammed maintenance. Accountability will be transferred to the NICP when aircraft are accepted for programmed depot maintenance. Aircraft accepted for unprogrammed depot maintenance will normally be processed on a repair and return-to-user basis.

b. The ARNG AVCRAD will perform AVIM and authorized depot maintenance in support of the ARNG aviation assets. In addition to AVIM maintenance, the AVCRAD will perform aircraft painting, major airframe repair, TASN-A management and AIMI component management. These functions are specifically discussed in NGB Pam 750-2. Requests to exceed maintenance authority and/or expenditures limits (funds/workhours) will be forwarded to ATCOM, ATTN: AMSAV-MCTP, 4300 Goodfellow Blvd, St. Louis, MO 63120, through CNGB, NGB-AVN-L.

5-22. Programmed depot maintenance

a. Programmed depot maintenance consists of aircraft overhaul, crash and battle damage repair, and modifications.

b. Aircraft will be selected as candidates for overhaul during peacetime under the Aircraft Condition Evaluation Program as shown below:

(1) Aircraft with established overhaul programs will be evaluated using criteria developed by the NMP on an annual basis by aircraft condition evaluation teams fielded by the NMP.

(2) Aircraft condition evaluation data will be used by the NMP to establish a profile index for each evaluated aircraft by serial number and to determine depot overhaul candidates.

(3) Aircraft with the highest profile index will be scheduled for the depot overhaul program first.

(4) Aircraft overhaul programs will be developed by ATCOM based on data, funding, and depot capability. The overhaul program will be finalized and coordinated with MACOMs at the annual Worldwide Aviation Logistics Conference. The NMP will notify MACOMs at least 60 days in advance of the scheduled overhaul date of specific aircraft to be retrograded.

(5) Aircraft scheduled for depot overhaul that subsequently incur crash or battle damage will be reported to the NMP for selection of replacement aircraft.

(6) As a related program to aircraft condition evaluation, the NMP will develop data from DA Form 1352 (Army Aircraft Inventory, Status and Flying Time (RCS DRC 130)) and TAMMS-A to assist in identifying possible depot maintenance candidates.

c. Aircraft in combat areas will be selected for depot maintenance per TM 55-1500-328-25. The NMP will coordinate with the MACOM concerned to determine quantities to be retrograded for overhaul. The MACOM will select aircraft overhaul candidates by aircraft serial number. Retrograde and replacement aircraft schedules will be furnished the MACOM at the annual Worldwide Aviation Logistics Conference.

d. Aircraft requiring crash or battle damage repair will be reported to, and disposed of, per instructions received from the NMP/NICP, using procedures prescribed in TB 43-0002-3.

e. Aircraft programmed for depot overhaul or crash and battle damage repair will have depot modifications installed during the overhaul process. Aircraft requiring depot modifications, which are not scheduled for depot overhaul or crash and battle damage repair, will be modified by contractor or depot modification teams. Depot modification programs for converting aircraft to later series (for example, OV-1C to OV-1D) will normally include overhaul as a part of the total program. Candidates for conversion should also be

overhaul candidates whenever practicable. Conversion and modification programs will be coordinated between NMP and MACOM during the Worldwide Aviation Logistics Conference.

f. All applicable documents, forms, and records will be processed per DA Pam 738-751 during depot maintenance. Personnel preparing contract work statements will ensure that the provisions of this publication are included in all applicable maintenance contracts.

5-23. Aircraft parts that have been exposed to fire and/or saltwater immersion

Aircraft parts, components, or assemblies that have been subjected or exposed to fire and/or saltwater immersion will not be reused locally under any circumstances. Such items will be condemned locally, or if considered repairable by competent inspection, returned through maintenance or supply channels for inspection and overhaul. All items that are to be condemned or returned for inspection and overhaul will require a statement on all applicable accompanying documentation, including DD Form 1577 (Unserviceable (Condemned) Tag-Materiel) or DD Form 1577-2 (Unserviceable (Repairable) Tag-Materiel) stating the item has been subjected or exposed to fire and/or saltwater immersion.

5-24. Items removed from crash-damaged aircraft

Extreme caution will be exercised in the reuse of items removed from crash-damaged aircraft or aircraft that have been involved in accidents. Items removed from a crashed aircraft or an aircraft that has been involved in an accident will not be reused regardless of apparent serviceability until such items have been subjected to a thorough inspection.

5-25. Inspection and testing of crash-damaged components and assemblies

a. All functional components and assemblies (for example, engines, transmissions, pumps, valves, generators, and blades) will be subjected to inspections and tests per the inspection and test standards required at the time of overhaul. Components not designed as overhaul items will be inspected and tested per the applicable maintenance manual. An item will either be condemned locally or evacuated to a depot maintenance facility according to the recoverability code assigned to the item.

b. All items that are to be locally condemned will require a completed DD Form 1577. This tag will be annotated to reflect that the item has been removed from a crashed aircraft or an aircraft that has been involved in an accident. Mutilation of condemned aeronautical items will be accomplished per TM 1-1500-328-23.

c. All items that are to be evacuated to a depot maintenance facility will require a statement on all applicable accompanying documentation, including DD Form 1577-2, to the effect that the item has been removed from a crashed aircraft or an aircraft that has been involved in an accident.

5-26. Inspection and testing of structural parts and assemblies of aircraft

Inspection and testing of structural parts and assemblies of aircraft structural parts and assemblies will, at a minimum, require a thorough visual inspection. Major support structures, fittings, attaching points, welds, flight control tubes and links, etc. will be subjected to nondestructive flaw detection tests and dimensional and alignment verifications.

5-27. Shipment of aircraft

Unserviceable items selected for disposal by ATCOM will not be reinstalled in an aircraft. Action will be taken to ensure that the airframe attaching elements of the removed items are protected from deterioration or contamination while awaiting the replacement item. However, if the unserviceable aircraft is to be shipped or transferred off post or station for repair, the unserviceable or interchangeable item must be installed or completely secured to prevent possible damage, deterioration, or contamination during movement of the aircraft. All unserviceable components will be individually tagged

with DD Form 1577-2 and suitable entries made in the aircraft equipment records.

5-28. Posting aircraft forms and records

Posting of aircraft forms and records will be per DA Pam 738-751.

5-29. Maintenance training aircraft

a. *Training aircraft.* Maintenance training aircraft are those employed for ground technical training that do not require airborne operations. Training aircraft are further classified as follows:

(1) *Category A.* Aircraft that can be returned to flyable status through minimum maintenance and modification. This category covers aircraft assigned on a temporary basis not to exceed 365 days, to meet special training requirements. Extensions may be granted by ATCOM.

(2) *Category B.* Aircraft that are capable of ground operation if all components are installed. Category B aircraft can be returned to flyable status by depot rebuild or overhaul.

(3) *Maintenance training airframes.* Retired and condemned aircraft used to train maintenance personnel. Aircraft in this category are retired or have been damaged or deteriorated beyond the MEL established in TB 43-0002-3. Classification to maintenance training airframe status results in the aircraft being permanently grounded. Maintenance training airframes will be reported on DA Form 1352.

(4) *Maintenance training devices.* Aeronautical equipment other than Category A or B aircraft, or maintenance training airframes, that are used to facilitate aircraft maintenance training. Items in this category range from uninstalled elements to mockups of major assemblies or functional groups.

b. *Training aircraft responsibilities.*

(1) Commander, ATCOM will—

(a) Provide aircraft for utilization as maintenance training aircraft based upon known requirements and as directed by AMC.

(b) Submit recommendations through AMC to HQDA (DALO-AV) for approval to classify and reclassify aircraft for maintenance training.

(c) Control current inventory of all maintenance training aircraft and distribute maintenance training aircraft to meet training.

(d) Provide required repair parts support and MWO kits for Category A and B maintenance training aircraft to the full extent required to accomplish maintenance prescribed in paragraph 5-22d.

(e) Provide required repair parts support for maintenance training that will ensure accomplishment of the training mission. Serviceable high-dollar value items (for example, engines, transmissions, rotor blades, propellers) are not authorized except when approved by ATCOM.

(f) Provide funding for repair of crash-damaged aircraft for use as a maintenance trainer.

(g) Provide training activities with unserviceable or crash damage components as they become available.

(2) CG, FORSCOM, CG TRADOC, major overseas commanders, and CNGB will—

(a) Present projected fiscal year consolidated requirements for maintenance training aircraft, maintenance trainers, components, and test equipment during the Worldwide Aviation Logistics Conference. Institutional training equipment requirements for the subsequent fiscal year will be obtained from annual requirements presented to HQDA in May-June each year.

(b) Receive, evaluate, and provide command approval or disapproval of all requests for maintenance training aircraft received from subordinate activities.

(c) Ensure that all maintenance training aircraft assigned to subordinate activities are maintained under this regulation.

(d) Determine if crash-damaged or uneconomically repairable aircraft can be exchanged for Category A or B aircraft already assigned to a training activity, prior to repairs being initiated.

(3) Commanders of activities possessing maintenance training aircraft will—

(a) Maintain maintenance training aircraft as prescribed herein.

(b) Report to ATCOM all excess maintenance training aircraft.

(c) Provide monthly reports of all maintenance training aircraft in their possession on DA Form 1352 per AR 700-138.

c. General policy.

(1) Installations' and units' authorized maintenance training aircraft will be designated by HQDA.

(2) Authority for the control, classification, and reclassification of aircraft defined as maintenance training aircraft rests with ATCOM.

(3) A predetermined quantity of aircraft will be assigned to TRADOC as maintenance training aircraft to satisfy initial distribution requirements. Total requirements will be satisfied by subsequent phased deliveries as aircraft become available from production or from the operational fleet.

(4) Category A and B maintenance training aircraft, and aircraft designated as maintenance training airframes, will be reported on DA Form 1352 per AR 700-138.

(5) Uneconomically repairable, crash-damaged, or retired aircraft may be used, when economically feasible, as a source for maintenance training airframes which will (whenever possible) be used as a replacement for Category A and B maintenance training aircraft, which can then be made available for return to flyable status, should a requirement exist. Any item removed from a crash-damaged aircraft for reuse will meet the criteria established by paragraphs 5-26 and 5-27. Final airframe classification will be made by ATCOM using TB 43-0002-3.

(6) Category A and B maintenance training aircraft, when no longer required, will be reported by letter to HQ TRADOC. HQ TRADOC will report excess maintenance training aircraft to HQ ATCOM.

(7) Maintenance training airframes and devices that are no longer needed will be reported to HQ TRADOC. Excess maintenance training airframes and devices will be reported by HQ TRADOC to ATCOM for disposition instructions.

(8) Categories assigned to maintenance training aircraft will not be redesignated without ATCOM approval.

(9) Aircraft items recorded on DA Form 2408-17 (Aircraft Inventory Record), when not required for training purposes on Category B maintenance training aircraft, will be returned to stock using normal supply procedures.

d. Maintenance of training aircraft.

(1) Category A aircraft will be maintained per applicable publications to a standard so that the aircraft can be returned to a completely operational flight status by AVIM within 60 working days. Category A aircraft should meet transfer serviceability standards prior to shipment to or from a designated training activity.

(2) Configuration control of Category B maintenance training aircraft will be maintained through the incorporation of all applicable MWOs, to the extent possible, to ensure that training is consistent with the field operational aircraft system. All systems/components required for program of instruction (POI) will be maintained operational and updated per the latest applicable MWOs. Removal and turn-in of systems/components not required for POI may be approved by ATCOM. Category B aircraft and components will be maintained so they can be returned to flight operational status by depot overhaul or repair. Aircraft transfer standards are not mandatory for transfer to depot or any activity authorized the use of Category B aircraft.

(3) Serviceable components/systems not covered in *d* (2) above will be preserved and periodically inspected, operated per appropriate technical manuals, and represerved.

(4) Components of maintenance training airframes that are not required for training purposes should be removed and returned to depot through normal supply channels. DD Form 1577-2 will be attached to each item. Disposition will be per AR 710-2.

e. Maintenance of "equipment logbook" records.

(1) Equipment logbooks and historical records will be maintained per DA Pam 738-751 and TM 1-1500-328-23, for all training aircraft, maintenance training airframes, and maintenance training devices.

(2) Ground operating time will be recorded on DA Form 2408-13 (Aircraft Status Information Record). A combination of

flight time and ground run time will be utilized to determine time change requirements. Requests for time change extensions of components on ground run aircraft may be submitted to ATCOM prior to removal of time change components.

(3) DA Form 2408-18 (Equipment Inspection List) inspections are required on Category A and B aircraft unless a waiver is granted by ATCOM.

f. Controlled substitution.

(1) Controlled substitution of serviceable components from Category A and B maintenance training aircraft to any flyable aircraft is authorized. These components must be determined serviceable or economically repairable by a qualified inspector and must be of proper configuration and have all modifications applied. The component or assembly removed from a Category A or B maintenance aircraft will be replaced with a like component. These actions must receive concurrence by ATCOM.

(2) Controlled substitution of components from maintenance training airframes or maintenance training devices may be made only between other maintenance training airframes or maintenance training devices. Removal or installation of components listed in TB 1-1500-341-01 will call for the submission of DA Form 2410 (Component Removal and Repair/Overhaul Record) per DA Pam 738-751 and TM 1-1500-328-23.

Section V

Maintenance of Rail Materiel

5-30. General

The term "rail materiel" includes motive power, general rolling stock, and special purpose mobile rail materiel owned and operated by the U.S. Army.

5-31. Maintenance policies

Unit, DS, GS, and depot maintenance will be accomplished per the policies set forth in chapters 3 and 4 and this section as supplemented by materiel publications and directives. U.S. Army-owned rail materiel will conform to standards established by Government regulatory bodies in the country where such rail materiel is operated in interchange service and is subject to the rules of such regulatory bodies.

5-32. Maintenance operations

a. DS and GS maintenance.

(1) DS and GS maintenance will be furnished using units by rail transportation companies that may be expanded by Army mobile rail teams. For support of DA utility rail materiel in CONUS where no support companies are available, all functions of DS and GS maintenance will be performed by the mobile rail repair shops (AR 700-53).

(2) The NMP will furnish the services of the mobile rail support shop for DA utility railroads on an "as required" basis and will direct its operation as follows:

(a) Army owned rail equipment will receive mobile rail services free.

(b) Defense supply depots and other DOD agencies may receive mobile shop services on a reimbursable basis.

(3) DA rolling stock moving over interchange in CONUS will have running repairs performed under AR 750-56.

b. Depot maintenance. Depot maintenance will be programmed by the NMP/NICP on the basis of inspections by rail maintenance technicians.

c. Maintenance reporting and recording. Maintenance reporting and recording for Army rail materiel will be under DA Pam 738-750.

d. Installations electing not to use mobile rail support shops. These installations may contract the service to an outside source if cost-effective, or may retain the work in-house if qualified personnel are available and support equipment is authorized.

Section VI

Maintenance of Communications Systems and Materiel Assigned to USAISC

5-33. General guidance

a. This section applies to maintenance of Army fixed and other USAISC-assigned telecommunications networks, systems, and automation equipment to include, but not limited to, the following:

- (1) Army portion of the Defense Communications System.
- (2) Theater Communication System (Army).
- (3) Base (post, camp, and station) communications automation and printing equipment.
- (4) Air defense communications systems (as assigned).
- (5) Army command and control networks.
- (6) American Forces Radio and Television Service distribution systems.

- (7) Army military affiliate radio systems.
- (8) Army worldwide leased telecommunications facilities.
- (9) INSCOM nontactical communications materiel.

b. The CG, USAISC is responsible for—

- (1) Maintenance support of all Army information systems above corps level not assigned by HQDA to other commands and agencies to include those listed in a above and functions listed in AR 10-13.

(2) The organization and operation of area maintenance and supply facilities.

- (3) Maintenance support teams.
- (4) Forward area support teams.
- (5) COMSEC logistics support facilities.
- (6) Module and repair activities required for dedicated retail logistics support of organic communications-electronics (C-E) materiel and other electronics materiel as assigned.

5-34. Maintenance policies

a. The CG, USAISC will approve maintenance levels authorized for all USAISC units and C-E fixed facilities. The approved maintenance levels are contained in the appropriate unit authorization document.

b. Maintenance will be performed by each unit or site, up to the level of maintenance authorized, per the maintenance allocation chart, and within the constraints of available resources. When approved by the CG, USAISC, COMSEC logistics support facilities (CLSF) will exchange and repair modules and PCBs instead of evacuating them depots or other external support facilities.

c. USAISC is responsible for operation of a dedicated retail logistics support system for all BASOPS C-E systems and materiel unique to the command. USAISC C-E materiel may be supported by another MACOM or military department facility when it is economically beneficial and responsive to USAISC operational requirements or established Defense Communications Agency (DCA) restoration criteria.

d. TMDE repair and calibration support will ensure attainment of the minimum goal of 95 percent TMDE availability and provide services responsive to USAISC operational requirements or established DCA restoration criteria.

5-35. Maintenance facilities

a. Unit level maintenance at small fixed facilities will be limited to operator maintenance. For other than operator maintenance these facilities must rely on support from maintenance support teams, forward area support teams, area maintenance and supply facilities, or other support maintenance facilities as designated in appropriate logistics and mission support plans.

b. The DS level of maintenance is normally authorized at medium to large manned C-E fixed self-sufficient facilities.

c. GS maintenance is normally authorized at a large facility and/or isolated C-E site or activity that must be provided with a high degree of self-sufficient maintenance. Factors supporting the performance of GS on site are type of mission, location, equipment density, and nature of materiel. Organic repair of unserviceable modules and PCBs and hardwired components is accomplished at

this level to the maximum extent authorized by the MAC and approved by HQ USAISC.

d. SRA maintenance functions coded "L" per the maintenance allocation chart are performed by maintenance support facilities selected by the CG, USAISC and approved by HQDA (DALO-SMM). Quick reaction maintenance support to supported activities is furnished through maximum use of ORF items.

e. Depot maintenance is not authorized to be performed by USAISC units. USAISC C-E materiel will be evacuated to DA designated CONUS depots, to include authorized manufacturer and contractor operated maintenance facilities, for the accomplishment of depot level maintenance. Depot level maintenance may be performed at the unit's location by depot level maintenance repair teams.

5-36. Area maintenance and supply facility

FM 29-23 and FM 29-24 establish the AMSF doctrine for GS facilities managed and operated by USAISC. AMSF is assigned the mission of furnishing centralized retail supply and maintenance support of USAISC telecommunications materiel, and other C-E materiel as assigned. This includes—

a. Furnishing maintenance support for all assigned Army communications materiel above corps level that are not assigned by HQDA to other commands and agencies in overseas areas.

b. Furnishing maintenance support teams to perform scheduled and emergency backup maintenance and technical assistance and instruction at the C-E facility or unit location that is beyond the unit's capability and authorization.

c. Maintaining an authorized stockage list of C-E supplies and C-E repair parts.

d. Maintaining approved stock record account (project support account) to receive, store, and issue items on C-E bills of materiel.

e. Maintaining an approved stock of ORF under AR 710-1 and AR 710-2 in support of fixed facilities and area maintenance and supply facility maintenance programs under FM 29-35.

f. Maintaining stock record accounts under AR 710-2 and USAISC directives.

g. Maintaining a capability to provide a training base for specialized C-E material, and to respond to emergency assistance requests from supported units.

h. Assisting supported units in correcting faults found during performance evaluations and inspections. AMSF also supports unit maintenance programs so as to improve and maintain the operational availability of the C-E systems and materiel.

i. Operating a module and PCB repair section capable of repairing unserviceables through the use of microelectronics repair methods and automatic test equipment.

j. Repairing peripheral materiel, such as power and environmental, when not supported by the facility engineer or other area support maintenance units.

5-37. Maintenance support team

The maintenance support team is that activity of a USAISC DS or GS maintenance facility that brings mobile maintenance support to CE fixed facilities or other USAISC units on a scheduled, emergency, or on-call basis. The C-E maintenance support teams are a functional responsibility of AMSF and other authorized command maintenance organizations; COMSEC maintenance support teams will be furnished by the CLSF.

5-38. Forward area support team

The forward area support team is a remotely located extension of the AMSF that performs scheduled and emergency backup maintenance and technical assistance at the C-E fixed facility or unit location.

5-39. Quality assurance

All USAISC DS and GS maintenance support facilities will institute effective quality control procedures in carrying out HQDA and

USAISC quality assurance programs. Quality control must be sufficiently independent of maintenance operations to ensure that inspections are not constrained.

Section VII

Maintenance of Nontactical Vehicles (NTV)

5-40. Maintenance operations

a. Authorized maintenance may be accomplished in transportation motor pool shops, IMMA, local commercial shops, or other Government maintenance activities as jointly determined by the motor pool manager and the IMO. In all cases, warranties are to be used to the maximum extent possible. Detailed policies on management of NTV are in AR 58-1.

b. Operator inspection and service consists of inspecting and detecting malfunctions that make the vehicle unsafe or unserviceable and includes minor or simple parts replacement and servicing (water, fuel, tires, and battery).

c. At those installations having consolidated maintenance shops, all maintenance is the responsibility of the IMO. NTV maintenance may be performed in the transportation motor pool shop, but will normally be performed in the consolidated shops.

5-41. Modifications

Modifications of NTV are covered in AR 58-1 and TM 38-600.

5-42. Repair parts supply

a. Repair parts for NTV are obtained under the provisions of AR 710-2.

b. Cannibalization of uneconomically repairable vehicles prior to turn-in to DRMO is limited to those serviceable parts immediately needed to repair inoperable vehicles.

c. Major commanders in overseas areas may authorize controlled exchange of repair parts from nontactical vehicles only when those repair parts are not otherwise available.

5-43. Operational readiness float (ORF)

ORF support of nontactical vehicles is not authorized.

Section VIII

Maintenance of Training Aids and Devices and Audiovisual Equipment and Systems

5-44. Training aids and devices

This section provides maintenance policy for training aids and devices. It supplements policies in AR 700-127 and AR 25-1. Training aids and devices used by the U.S. Army can be categorized as shown below.

a. Training aids and devices assigned to a MTOE unit are type classified and include simulators or end items.

b. Training aids and devices managed by TDA activities include—

(1) Non-type classified training aids and devices developed or commercially acquired to support general military training and training on more than one type item of materiel. These are usually assigned to and maintained by training and audiovisual support centers (TASC) for loan to units and activities.

(2) Type classified training aids and devices used to support a special training requirement.

c. Maintenance policy is as follows:

(1) Type classified and non-type classified training aids and devices will be maintained per this regulation.

(2) Equipment used for training for the original purpose (operator/crew training) will be maintained to the Army maintenance standard outlined in paragraph 3-1 a and turn-in/transfer standard in paragraph 4-6.

(3) Equipment (end items and major assemblies) that is frequently disassembled and assembled for instructional purposes will not be maintained to Army maintenance standard. Additionally, this equipment will be transferred or turned into the wholesale system under condition code "F" and not at -10/-20. If required for reissue,

equipment will be routed through depot maintenance before issue. Equipment will remain disassembled for instructional purposes.

(4) A maintenance plan as part of the logistic support plan will be developed and fielded with the materiel. Commercial off-the-shelf materiel procurement will include a maintenance support plan or justification for contract maintenance or interservice support.

(5) Type classified training aids and devices which are identified on MTOE or TDA documents will be maintained per the MAC. Support requirements beyond the user's authority or capability will be referred to the supporting IMMA.

(6) Locally fabricated training aids and devices will be maintained by the TASC. Maintenance above the capability of the TASC will be referred to the supporting IMMA.

(7) User commands are responsible for programming and budgeting funds for contract maintenance support for all training aids and devices under their control.

(8) Depot level maintenance will be furnished by AMC.

5-45. Audiovisual equipment and systems

This paragraph provides maintenance policy for audiovisual equipment and systems. It supplements policies in AR 700-127 and AR 108-2.

a. Audiovisual materiel includes photographic, television, audio, and graphic art items that furnish an audiovisual product or service.

b. Type classified audiovisual materiel is assigned to U.S. Army Communications-Electronics Command for management, fielding, and logistics support.

c. Audiovisual materiel assigned to an audiovisual facility or other TDA activity, including broadcast radio and television, may be developed or commercially acquired. The logistics supportability of commercially acquired materiel is the responsibility of the procuring activity. Local procurement will be coordinated with the local USAISC supporting activity for consolidation of contracts for maintenance services. Broadcast radio and television materiel and systems will be procured, managed, and supported by the Television Audio Support Activity, USAISC.

d. Maintenance policy is as follows:

(1) A maintenance plan as part of the logistic support plan will be developed and fielded with the materiel. Commercial off-the-shelf materiel procurement will include the equivalent of a maintenance support plan or justification for contract maintenance or interservice support.

(2) Type classified audiovisual materiel will be maintained per the MAC. Support requirements beyond the user's authority or capability and all non-type classified audiovisual materiel will be referred to the supporting USAISC, Director of Information Management (DOIM).

(3) Maintenance of audiovisual equipment and activities integrated with training device support activities may, at the option of the MACOM, be managed by the training community. Otherwise, contract requirements will be submitted to the supporting DOIM, who will coordinate the support.

(4) User commands are responsible for programming and budgeting funds for contract maintenance support for all audiovisual materiel under their control. Funds will be made available by the user to the supporting DOIM to support its contract efforts.

Section IX

Maintenance of Conventional Ammunition, Nuclear Weapons, and Nuclear Weapons Materiel

5-46. General guidance

a. *Conventional ammunition.*

(1) Ammunition maintenance consists of all actions necessary to retain ammunition in, or restore it to, a full, mission capable condition.

(2) Provisions must be made to accomplish maintenance at the storage location to the maximum extent possible.

(3) The maintenance program of an activity will be based on requirements determined by theater inventory control point/national

inventory control point (ICP/NICP). The maintenance to be performed by an activity will be based on the activity's assigned mission or as directed by the NMP.

(4) The condition code of ammunition will be determined by surveillance inspection or as directed by NMP.

b. Nuclear weapons and nuclear weapons materiel. Requirements for nuclear weapons and nuclear weapons materiel are contained in AR 700-65.

5-47. Maintenance policies

This section supplements chapter 4 for unit, DS, and GS level operations. Depot policies are in AR 750-2.

a. Unit maintenance will be performed by all activities having conventional ammunition on hand, including using units. Unit maintenance is performed to prevent the deterioration of ammunition due to rough handling and exposure.

b. Direct support maintenance will be performed by ammunition companies. DS maintenance on ammunition will include inspection, test, service (preservation and packaging), and repair of stocks stored by the ammunition companies. Ammunition companies normally perform a greater volume of DS maintenance when operating in a rear, semipermanent installation where more time, materiel, and personnel are available. The companies are also responsible for providing technical assistance to using units on their maintenance responsibilities.

c. Conventional ammunition renovation detachments will normally furnish GS maintenance on conventional ammunition in large ammunition supply points or depot complexes located in the communications zone. However, when practical, they may be deployed forward to perform maintenance rather than evacuate unserviceable ammunition.

d. Depot maintenance on ammunition consists of actions primarily comprised of renovation, modification, or reconfiguration. Depot maintenance will normally not be performed in an active theater; it is usually performed in CONUS or overseas theaters of long standing. Selected overseas installations coordinate with AMC to perform depot maintenance that augments the procurement program.

e. Maintenance reporting for conventional ammunition will be under DA Pam 738-750 and AR 700-22.

5-48. Maintenance planning

a. Conventional ammunition units will perform maintenance and demilitarization of ammunition only after receipt of a properly validated work authorization. Work authorization can be a DA Form 2407 (Maintenance Request), DA Form 2415 (Endorsement to Ammunition Condition Report), or letter of authorization. An assignment sheet (work order) can be added where a validated work authorization does not furnish sufficient information. The assignment sheet will be used within the organization and will normally provide for, but is not limited to, the following:

- (1) The scope of the maintenance work.
- (2) The lot number and quantity of rounds to be processed.
- (3) The lot number and quantity of replacement parts or components to be used.
- (4) Special instructions on inspection, operations, hazards, and disposition of unserviceable components resulting from operations.
- (5) Operations that must be performed to process the material, consisting of replacing parts, painting, changing nomenclature, adding a suffix, preparing data cards, and so forth.
- (6) Materials to include quantity to complete the work.

b. DMWRs for renovation or disposal of ammunition are composed of a series of sheets in the form of a pamphlet. Each sheet is an operational study of the technical features of the operation to be accomplished. The DMWR is approved and issued by the Director of Maintenance, U.S. Army Armament, Munitions, and Chemical Command for a variety of installations operating on a comparatively large production basis. The DMWR will be used as a guide for the ammunition officer preparing the details and procedures for completing the work in a theater of operation. DMWRs and LOIs are

the only procedural guidance authorized for performance of maintenance and demilitarization at installations. Exceptions to this policy must have the approval of the NMP.

Section X

Maintenance of Test, Measurement, and Diagnostic Equipment (TMDE)

5-49. General policies

a. This section provides policy for the support of Army TMDE.

b. AMC will furnish calibration and repair support for general and selected special purpose TMDE under AR 750-43, TB 750-25 and TB 43-180.

5-50. Support concept

The support concept for general purpose TMDE will make maximum use of existing assets and Army calibration and repair system standards.

5-51. TMDE support and management

TMDE repair support will normally be based on the concept that repair should be accomplished by the element designated in TB 43-180 as being responsible for calibration support. TMDE support will be as follows:

a. All TMDE owners or users will do unit level maintenance on organic TMDE. General purpose TMDE and selected special purpose TMDE repair support will be obtained from the area calibration repair center (ACRC) responsible for supporting the geographic area where the TMDE owner or user is located. Repair support for the remaining special purpose TMDE will be obtained from the maintenance organization responsible for maintaining the associated system or end item. Medical activities will refer to AR 40-61.

b. DS, GS, and AVIM units will do unit maintenance on organic TMDE and furnish support services for organic and supported units special purpose TMDE.

c. Complex TMDE requiring multilevel maintenance support will be repaired and calibrated using assets from all required levels.

Section XI

Maintenance of Automatic Data Processing Equipment (ADPE)

5-52. Logistic support policy for ADPE

a. Embedded ADPE. All embedded tactical ADPE will be maintained using the Army maintenance system. Embedded ADPE are systems or components that are specifically designed and produced to perform functions as an integrated part of non-information systems. Embedded ADPE have no general purpose capability outside the system of which it is a part and are not separable for other uses without redesign or modification.

b. Maintenance specific to the Tactical Army Combat Service Support Computer System (TACCS).

(1) The user/operator is responsible for basic PMCS. Diagnosis will be performed by the unit automation information systems (AIS) maintenance personnel in coordination with the Combat Service Support Automation Management Office (CSSAMO). Unit AIS maintenance personnel will turn in faulty components to the SSA.

(2) The SSA will issue a replacement to the unit AIS maintenance personnel and work order the faulty component to the supporting DS maintenance activity for fault verification, alignments, and/or adjustments.

(3) After screening at the DS activity, serviceable components are returned to the SSA, and unserviceable components are evacuated to the contractor/depot for repair and return to the SSA on a non-reimbursable basis for the life-cycle of TACCS.

c. Maintenance specific to all ADPE used to support tactical STAMIS applications.

Tactical STAMIS also include the Standard Army Maintenance System-installation/ Table of Distribution and Allowances (SAMS-I/TDA), Standard Installation/Division Personnel System-3 (SIDPERS-3), Standard Property

Book System–Redesign–I/TDA (SPBS–R–IITDA), and Standard Army Ammunition System–4 (SAAS–4).

(1) The unit AIS maintenance personnel in coordination with the CSSAMO will support the user/operator in diagnosis and repair of faulty components. Failed LRUs will then be turned in to the supporting SSA.

(2) Software related problems will be resolved in coordination with the supporting CSSAMO, Personnel Automation Section (PAS), or other appropriate automation office.

(3) The SSA will issue a replacement LRU to the unit AIS maintenance personnel from on-hand SCX assets and work order the faulty LRU to the supporting DS maintenance activity for fault verification, alignment and/or adjustment, and repairs not requiring repair parts. If the DS maintenance activity is able to correct the fault, the LRU will be returned to the SSA. If the DS maintenance activity is unable to repair the LRU without repair parts, it will contact its designated depot /FRA Customer Service Office. The CSO, within the guidelines for MEL defined in paragraph 4–5, will provide disposition instructions which may include warranty guidance.

d. Any computers procured by a MACOM to support a tactical STAMIS may be repaired using these procedures, provided that the MACOM has coordinated and funded that support with the depot/ FRA through the appropriate AMC MSC in accordance with paragraph 4–44. Following appropriate approval, the CSO will maintain information on systems that are authorized repair under these procedures.

5–53. Base operations (BASOPS) ADPE

ADPE obtained for BASOPS support through the Information Management Area (IMA) process is supported through the Directors of Information Management/Deputy Chief of Staff for Information Management organizations. Although these systems are not part of tactical automation, maintenance may be obtained through the depot after coordination with the appropriate AMC MSC.

Section XII

Maintenance of Organizational Clothing and Individual Equipment (OCIE)

5–54. Maintenance policy

a. OCIE issued to soldiers will be inspected to determine serviceability as required by AR 700–84 and DA Pam 710–2–1. Normal maintenance, which would reasonably be expected to be performed within a unit, must be performed by the individual to whom the organizational clothing or equipment is assigned. This maintenance includes cleaning, spot removal, repair of tears or rips, and replacement of buttons.

b. Each installation or activity will ensure clothing and materiel beyond organizational repair capability is turned into a central location for repair and return to stock or classification as unserviceable and turn-in to DRMO.

c. The USPFO may authorize negotiation of local contracts for the maintenance of clothing and equipment for the ARNG as follows:

(1) Minor alterations and repairs of individual clothing.

(2) Minor repairs of USPFO stocks to reclassify items to a serviceable status for reissue.

d. Major alterations for the purpose of modifying items will require prior approval of Chief, National Guard Bureau.

e. Laundry and dry cleaning services. Laundry and dry cleaning services are authorized as follows:

(1) Laundry services in support of AT per NGB Pam 350–1.

(2) Laundry and dry cleaning services in support of IDT. These services should be obtained at the lowest possible cost for the following items:

(a) White organizational clothing and equipment issued to medical and food service personnel.

(b) Sheets, pillow cases, and mattress covers.

(c) USPFO stocks of serviceable individual and organizational clothing and equipment prior to reissue.

(d) Individual clothing for interment of deceased personnel when burial is authorized from Federal funds.

(e) Blankets and sleeping bags.

(f) Army band distinctive uniforms as authorized by CTA 50–903.

5–55. Maintenance expenditure limits

Maintenance expenditure limits can be found in TB 43–0002–27.

Section XIII

Maintenance of Tactical Intelligence and Electronic (IEW) Materiel

5–56. General

a. This section applies to the maintenance of army tactical IEW equipment, including MTOE, TDA, and loaned materiel. Tactical IEW equipment includes but is not limited to, the following:

(1) Army IEW equipment fielded to corps, divisions, armored cavalry regiments, brigades, and battalions.

(2) INSCOM tactical IEW equipment.

(3) MACOM developed, procured, and fielded IEW equipment, including non–developmental items (NDI) and commercial off–the–shelf (COTS) items.

b. The CG, AMC, is responsible for the support of Army IEW materiel with the U.S. Army CECOM Intelligence Materiel Management Center (USACIMMC) being designated as the Army Lead Army Organization for tactical IEW logistics sustainment.

c. The IEW GS regional support center (RSC) is an integrated repair activity which provides the field with a dedicated support structure for low density IEW systems.

d. Joint operations equipment developed for special operations forces units is exempt from the requirements of this section.

5–57. IEW maintenance policies

a. USACIMMC has single point responsibility within the Army for IEW logistics sustainment. As part of this responsibility, all sustainment contracts will be consolidated under the control of USACIMMC. Centralized support for IEW materiel will be extended to all fielded systems including systems fielded for prototyping analysis, independent of current level of acquisition management. The support includes hardware and software sustainment resources supporting developmental, NDI, and COTS systems.

b. The emerging generation of IEW systems requires a sustainment concept that provides for repair as far forward on the battlefield as possible. The RSC provides this support to the field. System and maintenance software troubleshooting and repair, along with a reconfiguration capability, will be integrated into the RSC whenever possible.

5–58. IEW unit maintenance

a. IEW unit maintenance personnel are authorized by TOE to perform unit and DS levels of maintenance. This typically includes replacement of LRUs, circuit card assemblies (CCAs), and piece parts when authorized by the MAC.

b. IEW maintenance activities are authorized to establish and maintain PLL or shop stocks, per AR 710–2, for repair parts supporting IEW equipment repair.

c. PLLs and shop stocks will be maintained using the unit level logistics system (ULLS) and SAMS, respectively.

d. Tools and TMDE required for the maintenance of IEW materiel are authorized by appropriate MTOE, TDA, technical manual, or letter authorization. Materiel will be obtained per AR 710–2.

e. Maintenance requirements beyond the unit level require a maintenance request to be processed through the unit's DS SAMS to the GS RSC.

5-59. IEW GS RSC maintenance

The RSC will centralize IEW maintenance management and maximize integration of the soldier and contractor/civilian regional support. The RSC will provide maintenance support for items not repairable at the IEW unit level. It is a tailored activity, based on the units and equipment supported in the regional area.